

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MYEONG-HWAN LEE

Appeal No. 2002-0477
Application 09/115,996

HEARD: FEBRUARY 20, 2003

Before HAIRSTON, RUGGIERO, and BLANKENSHIP, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 through 6. After submission of the brief, the examiner objected to claims 3 and 6 (answer, pages 2 and 7). Accordingly, claims 1, 2, 4 and 5 remain before us on appeal.

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The disclosed invention relates to a method and apparatus for removing co-channel interference in a simulcast receiver for receiving a high definition television (HDTV) signal having a digital format and an analog broadcasting TV signal by detecting either a synchronous signal or a reference signal from the analog broadcasting TV signal.

Claim 1 is illustrative of the claimed invention, and it reads as follows:

1. A co-channel interference canceler in a simulcast receiver for receiving a high definition television (HDTV) signal having a digital format and an analog broadcasting TV signal, comprising:

a detector for detecting a synchronous signal from said analog broadcasting TV signal, determining whether or not the analog TV signal is received based on whether or not the synchronous signal is detected, and outputting a detection signal indicating whether or not the analog TV signal is received;

a co-channel interference rejection filter for removing co-channel interference from a first input signal including co-channel interference and outputting a second input signal; and

a selector for selecting either the first or second input signal according to said detection signal.

The reference relied on by the examiner is:

Citta et al. (Citta)	5,821,988	Oct. 13, 1998
		(filed Dec. 19, 1995)

Claims 1, 2, 4 and 5 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Citta.

Reference is made to the briefs (paper numbers 12 and 14) and the answer (paper number 13) for the respective positions of the appellant and the examiner.

OPINION

We have considered the entire record before us, and we will reverse the anticipation rejection of claims 1, 2, 4 and 5.

All of the claims on appeal require the detecting of a synchronous signal or a reference signal from the analog broadcasting TV signal. According to the examiner (answer, pages 3 through 7), the items 38 and 40 in Figure 1 of Citta detect a synchronous signal or a reference signal from the NTSC picture carrier signal. Appellant argues (brief, pages 7 through 9; reply brief, pages 4 through 7) that the NTSC picture carrier signal is neither a synchronous signal nor a reference signal of the analog broadcasting signal. We agree. Although Citta provides a "circuit for determining when an NTSC co-channel interference reduction filter [20] may be advantageously incorporated in the signal path of an HDTV receiver" (column 1, lines 49 through 52), Citta uses a comparison between NTSC power (i.e., the output from power averaging circuit 38) and white noise (i.e., the output from white noise power averaging circuit 52) to determine when the co-channel interference filter 20

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should be placed in the signal path of the HDTV receiver
(column 2, lines 29 through 52; column 3, lines 15 through 23).
The examiner's contentions to the contrary notwithstanding, the
record on appeal lacks an evidentiary link between NTSC
power/white noise and the claimed synchronous signal and
reference¹ signal.

In view of the foregoing, the anticipation rejection of
claims 1, 2, 4 and 5 is reversed.

DECISION

The decision of the examiner rejecting claims 1, 2, 4 and 5
under 35 U.S.C. § 102(e) is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
JOSEPH F. RUGGIERO)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
)	
HOWARD B. BLANKENSHIP)	
Administrative Patent Judge)	

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¹ Citta states (column 2, lines 42 through 45) that fixed
reference components of the received signal are nulled out.

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